



# Food Service Technology Center Appliance Test Summary Report

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<b>Manufacturer</b>	Taylor Company
<b>Model</b>	C842-23
<b>Appliance</b>	3-foot standard electric griddle with optional top side cookers
<b>Griddle Plate</b>	24 x 38 inch

<b>Report Number</b>	50130953
<b>Report Date</b>	January 2010
<b>Tested By</b>	D. Cowen

## Purpose of Testing

This testing determined the energy input rate, preheat time and energy, idle energy rate and heavy-load cooking-energy efficiency of the griddle by applying the ASTM F1275-03 Standard Test Method with the griddle operating in single-sided mode.

## Energy Input Rate

Rated Energy Input Rate (kW)	25.0
Measured Energy Input Rate (kW)	24.5
Difference (%)	1.86

## Preheat to 375°F

Duration (min)	10.83
Energy Consumption (kWh)	2.80
Preheat Rate (°F/min)	25.7

## Idle at 375°F

Idle Energy Rate (kW)	1.93
Normalized Idle Energy Rate (W/ft <sup>2</sup> )	305

## Heavy-Load Cooking Energy Efficiency <sup>a</sup>

Food Product	Hamburgers
Load Size (Count)	24
Cook Time (min)	6.63
Average Recovery Time (min)	< 1.0
Cooking Energy Rate (kW)	8.74
Energy to Food (Btu/lb)	507
Energy to Appliance (Btu/lb)	628
Cooking-Energy Efficiency (%)	80.8 ± 1.6
Production Capacity (lb/hr)	47.5 ± 1.2

<sup>a</sup> based on a minimum of three test replicates.



**Taylor C842-23 electric griddle.**  
(shown with optional top side cookers)

## Taylor Company

750 N. Blackhawk Blvd.  
Rockton, IL 61072

[www.taylor-company.com](http://www.taylor-company.com)

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## Heavy-Load Test Data

	Repetition #1	Repetition #2	Repetition #3
<b>Measured Values</b>			
Electrical Energy Consumption (Wh)	6,545	6,664	6,664
<b>Cook Time (min)</b>	<b>6.77</b>	<b>6.58</b>	<b>6.53</b>
Total Test Time (min)	46.10	45.36	45.02
Weight Loss (%)	36.66	36.56	36.99
Initial Weight (lb)	36.064	36.094	35.822
Final Weight (lb)	22.842	22.897	22.573
Initial Fat Content (%)	16.1	16.1	16.1
Initial Moisture Content (%)	63.9	63.9	63.9
Final Moisture Content (%)	53.6	53.2	52.0
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	167	167	168
<b>Calculated Values</b>			
Initial Weight of Water (lb)	23.045	23.064	22.890
Final Weight of Water (lb)	12.239	12.189	11.743
Weight of Fat (lb)	5.806	5.811	5.767
Weight of Solids (lb)	7.213	7.219	7.164
Sensible to Ice (Btu)	369	369	366
Sensible to Water (Btu)	3,114	3,110	3,112
Sensible to Fat (Btu)	388	388	387
Sensible to Solids (Btu)	241	241	241
Latent – Water Fusion (Btu)	3,318	3,321	3,296
Latent – Fat Fusion (Btu)	228	228	225
Latent – Heat of Vaporization (Btu)	10,482	10,549	10,813
Total Energy to Food (Btu)	18,140	18,206	18,441
<b>Energy To Food (Btu/lb)</b>	<b>503</b>	<b>504</b>	<b>515</b>
Total Energy to Griddle (Btu)	22,340	22,747	22,746
<b>Energy to Griddle (Btu/lb)</b>	<b>619</b>	<b>630</b>	<b>635</b>
<b>Cooking-Energy Efficiency (%)</b>	<b>81.2</b>	<b>80.0</b>	<b>81.1</b>
<b>Cooking Energy Rate (kW)</b>	<b>8.52</b>	<b>8.82</b>	<b>8.88</b>
<b>Production Rate (lb/h)</b>	<b>46.9</b>	<b>47.7</b>	<b>47.7</b>
<b>Average Recovery Time (min)</b>	<b>0.92</b>	<b>0.98</b>	<b>0.97</b>

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